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OM protein - protein search, using sw model

Run on: June 12, 2003, 15:26:44 ; Search time 36 seconds
(without alignments)
70.327 Million cell updates/sec

Title: US-09-869-540A-2
Perfect score: 113
Sequence: 1 DFDLRCMLGRVYRCQKV 19

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 08
Maximum Match 1008
Listing first 45 summaries

Database :

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22: /SID52/gcgdata/geneeq/geneeqp-emb1/AA2001.DAT:*
23: /SID52/gcgdata/geneeq/geneeqp-emb1/AA2002.DAT:*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	113	100.0	19	AA07358	Cyclic mammalian m
2	113	100.0	19	AA16571	Melanin-concentrat
3	113	100.0	19	AA12777	Rat MCH ligand pep
4	113	100.0	19	AA90239	Melanin concentrat
5	113	100.0	19	AA025615	G Protein-coupled
6	113	100.0	19	AA07335	Mammalian melanin-
7	113	100.0	19	AA06894	Human mCH
8	113	100.0	19	AA048153	Rat/human melanin-
9	113	100.0	19	AA037951	Melanin concentrat
10	113	100.0	19	AA077533	Melanin concentrat

11	113	100.0	165	11	AA07360	Rat melanin-concen
12	107	94.7	18	21	AA012780	Rat MCH ligand pep
13	107	94.7	18	23	AA077534	Melanin concentrat
14	101	89.4	17	23	AA077535	Melanin concentrat
15	101	89.4	19	22	AA077537	Human truncated me
16	97	85.8	16	21	AA012781	Rat MCH ligand pep
17	97	85.8	19	22	AA077538	Human truncated me
18	95	84.1	16	21	AA012782	Rat MCH ligand pep
19	95	84.1	16	23	AA077536	Melanin concentrat
20	93	82.3	16	21	AA012776	Rat SLC-1 ligand p
21	93	82.3	16	22	AA077534	Human truncated me
22	90	79.6	15	21	AA012783	Rat MCH ligand pep
23	90	79.6	15	23	AA077537	Melanin concentrat
24	90	79.6	17	4	AA030689	Sequence of growth
25	88	77.9	17	4	AA030438	Sequence of growth
26	88	77.9	17	5	AA040253	Growth hormone rel
27	87	77.0	17	4	AA030688	Sequence of growth
28	87	77.0	17	22	AA025616	Sequence of growth
29	87	77.0	17	22	AA048154	Salmon melanin-con
30	86	76.1	14	21	AA077538	Rat MCH ligand pep
31	86	76.1	14	23	AA012784	Melanin concentrat
32	81	71.7	13	21	AA012785	Rat MCH ligand pep
33	81	71.7	13	22	AA077536	Human truncated me
34	81	71.7	13	23	AA077539	Human truncated me
35	66	58.4	11	22	AA077531	Melanin concentrat
36	66	58.4	11	22	AA077539	Human truncated me
37	66	58.4	11	22	AA077539	Human truncated me
38	66	58.4	11	22	AA077539	Human truncated me
39	66	58.4	11	22	AA077539	Human truncated me
40	66	58.4	11	22	AA077539	Human truncated me
41	66	58.4	11	22	AA077539	Human truncated me
42	66	58.4	11	22	AA077539	Human truncated me
43	66	58.4	11	22	AA077539	Human truncated me
44	66	58.4	11	22	AA077539	Human truncated me
45	66	58.4	11	22	AA077539	Human truncated me

ALIGNMENTS

RESULT 1	AA07358	standard; protein; 19 AA.
ID	AA07358	
AC	AA07358	
AC	AA07358	
DT	29-JAN-1991	(first entry)
DE	Cyclic mammalian melanin-concentrating hormone peptide.	
XX	Melanin concentrating hormone; skin disorders; melanomas;	
KW	MCH secretion.	
XX	synthetic.	
XX	Key	Location/Qualifiers
XX	Disulfide-bond 7..16	
XX	MO9011295-A.	
XX	04-OCT-1990.	
XX	20-MAR-1990;	90MO-US01492.
XX	22-MAR-1989;	89US-0326984.
XX	(SALK) SALK INST FOR BIOL STUD.	
XX	Vaughan J, Fischer WH, Rivley JE, Nahon JM, Presse FG, Vale MW;	
XX	WPI: 1990-320225/42.	
XX	N-PSDB: AA006238.	

PT Cyclic mammalian hormone for concentrating mammalian melanin -
 PT comprises peptide based on 19 amino acid residues with cysteine
 linkages.
 XX
 PS Claim 2: page 43: 47pp: English.
 XX
 CC This is the sequence of a cyclic mammalian melanin-concentrating
 CC hormone (MCH) peptide. MCH is useful for treating skin disorders,
 CC for suppressing the proliferation of melanoma cells and for
 CC modulating secretion of ACTH. Monoclonal antibodies raised against
 CC this peptide sequence are useful for assaying tumour cells.
 CC See also AA06239-48.
 XX
 SQ Sequence 19 AA:
 OY Query Match 100.0%; Score 113; DB 11; Length 19;
 DB Best Local Similarity 100.0%; Pred. No. 1e-09;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 1 DFDMLRCMLGRYRRCMOV 19
 1 DFDMLRCMLGRYRRCMOV 19
 RESULT 2
 ID AAY16571 standard; peptide, 19 AA.
 XX AAY16571;
 XX 10-AUG-1999 (first entry)
 DE Melanin-concentrating hormone peptide sequence.
 XX
 KW Human 11cb splice variant; antibacterial; gene therapy; vaccine; HIV-1;
 KW HIV-2; pain; cancer; diabetes; obesity; anorexia; bulimia; asthma;
 KW Parkinson's disease; heart failure; hypotension; hypertension;
 KW urinary retention; osteoporosis; angina pectoris; myocardial infarction;
 KW ulcer; allergy; benign prostatic hypertrophy; psychotic disorder;
 KW neurological disorder; anxiety; schizophrenia; manic depression;
 KW delirium; dementia; severe mental retardation; dyskinesia;
 KW Huntington's disease; Gilles de la Tourette's syndrome;
 KW bacterial adhesion; Melanin-concentrating hormone.
 XX
 OS Homo sapiens.
 XX
 PN W09928492-A1.
 PD 10-JUN-1999.
 XX
 PF 02-DEC-1998; 98MO-0525497.
 XX
 PR 15-APR-1998; 98US-0060504.
 PR 03-DEC-1997; 97US-0984288.
 PR 05-FEB-1998; 98US-0073747.
 XX
 PA (SMIR) SMITHKLINE BEECHAM CORP.
 PI Ames RS, Bergama D, Chambers JR, Ellis CE, Foley JJ;
 PI Sarau HM;
 DR WPI; 1999-371132/31.
 XX
 PT New human 11cb splice variant polypeptide and polynucleotide
 XX
 PS Example 3; Page 45; 56pp: English.
 CC
 CC The present sequence represents melanin-concentrating hormone, which is a
 CC ligand for the human 11cb splice variant polypeptide. 11cb splice variant
 CC polypeptides and polynucleotides are useful for diagnosing diseases due
 CC to an infection of an organism with the 11cb splice variant gene. They
 CC can diagnose the stage and type of infection. 11cb splice variant
 CC polypeptides are also useful for screening for compounds which affect

CC activity of the protein. These can be used in treatment to inhibit
 CC (antagonist i.e. antibacterial drugs) or enhance (agonist) 11cb splice
 CC variant activity, in addition to direct administration of 11cb splice
 CC variant polypeptides to treat conditions associated with a lack of 11cb
 CC splice variant polypeptide, or direct administration of antisense
 CC sequences to prevent expression. 11cb splice variant polypeptides
 CC (administered directly, in a vector i.e. gene therapy, and as a vaccine)
 CC and antibodies induce an immune response to immunize and prevent disease.
 CC Diseases diagnosed, prevented or treated include HIV-1 or -2 infection;
 CC pain; cancer; diabetes; obesity; feeding and drinking abnormalities
 CC e.g. anorexia, bulimia; asthma; Parkinson's disease; acute and congestive
 CC heart failure; hypotension; hypertension; urinary retention;
 CC osteoporosis; angina pectoris; myocardial infarction; ulcers; allergies;
 CC benign prostatic hypertrophy and psychotic and neurological disorders,
 CC including anxiety, schizophrenia, manic depression, delirium, dementia
 CC or severe mental retardation, and dyskinesias, such as Huntington's
 CC disease or Gilles de la Tourette's syndrome. 11cb splice variant
 CC polypeptides, polynucleotides and their (ant)agonists can prevent
 CC adhesion of bacteria to matrix proteins, and are useful for use on
 CC wounds and body implants to prevent bacterial infection.
 XX
 SQ Sequence 19 AA:
 OY Query Match 100.0%; Score 113; DB 20; Length 19;
 DB Best Local Similarity 100.0%; Pred. No. 1e-09;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 1 DFDMLRCMLGRYRRCMOV 19
 1 DFDMLRCMLGRYRRCMOV 19
 RESULT 3
 ID AAB12777 standard; peptide, 19 AA.
 XX AAB12777;
 XX 22-NOV-2000 (first entry)
 DE Rat MCH ligand peptide SEQ ID NO:2.
 XX
 KW SIC-1; MCH; melanin concentrating hormone; screening; eating;
 KW appetite stimulator; appetite regulator; period pain; atonic bleeding;
 KW caesarean section; milk congestion; antidiabetic agent; drug;
 KW foetal asphyxia; cervical rupture; premature birth; uterine rupture;
 KW Prader-Willi syndrome; anorectic; gynaecological; abortifacient;
 KW anaemia; anabolic; orphan G protein-couple receptor protein.
 XX
 OS Rattus sp.
 XX
 PN W0200040725-A1.
 PD 13-JUL-2000.
 XX
 PF 27-DEC-1999; 99WO-JP07336.
 XX
 PR 28-DEC-1998; 98JP-0374454.
 PR 28-APR-1999; 98JP-0122668.
 PR 02-SEP-1999; 99JP-0249300.
 XX
 PA (TAKE) TAKEDA CHEM IND LTD.
 PI Mori M, Shimomura Y, Takekawa S, Sugo T, Ishibashi Y, Kitada C;
 PI Suzuki N;
 DR WPI; 2000-475832/41.
 XX
 PT Screening methods for compounds as SIC-1 (antagonists useful in the
 PT treatment of eating disorders and as preventives and remedies for e.g.

PT atonic bleeding and Prader-Willi syndrome -
XX
PS Claim 8, Page 106, 133pp: Japanese.
XX
XX The present invention describes a method for screening components (I) or
CC their salts that can alter the binding properties of melanin-
CC concentrating hormone (MCH) or its derivative or salt to SLIC-1 or its
CC salt. Compounds identified by (I) are useful as SLIC-1 (ant)agonists in
CC eating disorders and as preventives and remedies for e.g. period pains,
CC pregnancy recovery failure, caesarean section, artificial interruption of
CC uterine recovery failure, tonic uterine contraction, foetal asphyxia,
CC rupture of uterus, cervical rupture, premature birth and Prader-Willi
CC syndrome. The present sequence represents a rat MCH ligand peptide
CC which is used in the exemplification of the present invention.
XX
SQ Sequence 19 AA;
Query Match 100.0%; Score 113; DB 21; Length 19;
Best Local Similarity 100.0%; Pred. No. 1e-09;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 DFDMLRCMGRVYRRCMV 19
DB 1 DFDMLRCMGRVYRRCMV 19
RESULT 4
ID AAY90259 standard; Peptide: 19 AA.
XX AAY90259;
XX
XX 19-SEP-2000 (first entry)
XX
XX Melanin concentrating hormone peptide.
XX
XX Human: 11cby; diagnosis: therapy; infection; cancer; diabetes; obesity;
XX anorexia; bulimia; asthma; Parkinson's disease; congestive heart failure;
XX hypotension; hypertension; urinary retention; osteoporosis; delirium;
XX angina pectoris; myocardial infarction; ulcer; allergy; manic depression;
XX benign prostatic hypertrophy; psychiatric disorder; neurological disorder;
XX anxiety; schizophrenia; dementia; severe mental retardation; dyskinesia;
XX Huntington's disease; Gilles de la Tourette's syndrome;
XX genetic counselling; melanin-concentrating hormone.
XX
XX Homo sapiens.
XX
XX WO200037113-A1.
XX
XX 29-JUN-2000.
XX
XX 22-DEC-1999; 99WO-US30622.
XX
XX 22-DEC-1998; 98US-0218467.
XX
XX (SMIR) SMITHKLINE BEECHAM CORP.
XX
XX Sathe G, Ellis CE, Halsey W, Bergsma D;
XX
XX WPI; 2000-452132/39.
XX
XX Novel 11cby polynucleotides for diagnosis, prevention and treatment of
XX cancer, diabetes, psychotic and neurological disorders, microbial
XX infections and for genetic counselling -
XX
XX Disclosure; Page 6; 45pp: English.
XX
XX This sequence represents a melanin-concentrating hormone peptide, that
XX is bound by the human 11cby protein of the invention. 11cby
XX polynucleotides are useful as diagnostic reagents for detecting the
XX presence or absence of a variation in a 11cby allele in an individual.
XX Assaying for the presence or absence of a 11cby polynucleotide mutation
XX by isolating DNA from the individuals is useful for screening an

CC individual for an increased risk of developing a disease or for
CC diagnosing a disease. 11cby polynucleotides may contain polymorphic
CC markers, and are therefore useful for genetic association
CC studies searching for a disease susceptibility gene and/or therapeutic
CC response gene. Diseases treated include bacterial, fungal, protozoan and
CC viral infections, particularly infection caused by human immunodeficiency
CC virus (HIV)-1 or HIV-2, cancers, diabetes, obesity, feeding and drinking
CC abnormalities, such as anorexia and bulimia, asthma, Parkinson's disease,
CC acute and congestive heart failure, hypotension, hypertension, urinary
CC retention, osteoporosis, angina pectoris, myocardial infarction, ulcers,
CC allergies, benign prostatic hypertrophy, psychiatric and neurological
CC disorders, including anxiety, schizophrenia, manic depression, delirium,
CC dementia or severe mental retardation, and dyskinesias, such as
CC Huntington's disease or Gilles de la Tourette's syndrome. The methods for
CC detecting a mutation in the 11cby gene, can therefore be further extended
CC to include genetic counselling for an individual with respect to the
CC individual's potential for developing one of the above diseases.
XX
SQ Sequence 19 AA;
Query Match 100.0%; Score 113; DB 21; Length 19;
Best Local Similarity 100.0%; Pred. No. 1e-09;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 DFDMLRCMGRVYRRCMV 19
DB 1 DFDMLRCMGRVYRRCMV 19
RESULT 5
ID ANU25615 standard; Peptide: 19 AA.
XX ANU25615;
XX
XX 18-DEC-2001 (first entry)
XX
XX G Protein-Coupled Receptor-binding cyclic neuropeptide A.
XX
XX Human: G-protein coupled receptor; GPCR; mental disorder; schizophrenia;
XX attention deficit disorder; anxiety; depression; bipolar disorder;
XX neurological disorder; Huntington's disease; obesity; anorexia;
XX metabolic disorder; Parkinson's disease; Tourette's syndrome; thrombosis;
XX type 2 diabetes; cardiovascular disorder; myocardial infarction; cancer;
XX cardiomyopathy; atherosclerosis; human immunodeficiency virus; HIV;
XX viral infection; immunostimulant; neuroleptic; nootropic; tranquiliser;
XX antidepressant; anorectic; gene therapy.
XX
XX Homo sapiens.
XX
XX WO200162797-A2.
XX
XX 30-AUG-2001.
XX
XX 23-FEB-2001; 2001WO-US05676.
XX
XX 23-FEB-2000; 2000US-0184247.
XX
XX 23-FEB-2000; 2000US-0184303.
XX
XX 23-FEB-2000; 2000US-0184304.
XX
XX 23-FEB-2000; 2000US-0184305.
XX
XX 23-FEB-2000; 2000US-0184397.
XX
XX 02-MAR-2000; 2000US-0186457.
XX
XX 03-MAR-2000; 2000US-0186810.
XX
XX 09-MAR-2000; 2000US-0188064.
XX
XX 13-MAR-2000; 2000US-0188880.
XX
XX 03-APR-2000; 2000US-0194344.
XX
XX 23-JUN-2000; 2000US-0213861.
XX
XX 11-JUL-2000; 2000US-0217370.
XX
XX 14-JUL-2000; 2000US-0218337.
XX
XX 20-JUL-2000; 2000US-0218492.
XX
XX (PHAA) PHARMACIA & UPJOHN CO.

XX PI Vogell G, Wood LS, Parodi LA, Lind P:
 XX DR WPI; 2001-570628/64.
 XX PT New isolated nucleic acid encoding a new G-protein coupled receptor
 XX PT polypeptide for detecting receptor modulators that can treat mental
 XX PT disorders, such as schizophrenia, anxiety, depression, or obesity -
 XX PS Claim 95; Page 140; 279pp; English.
 XX CC Sequences AAV25554-AAV25616 represent human G-protein coupled receptor
 CC (GPCR) polypeptides of the invention. The proteins and their associated
 CC DNA sequences can be used to identify compounds which bind to GPCR
 CC polypeptides and in screening for compounds that modulate GPCR activity.
 CC By screening a human subject for the presence of mutations in GPCR DNA, a
 CC GPCR-related disorder or a genetic predisposition can be diagnosed. The
 CC sequences can also be used for treatment and prevention of mental
 CC disorders such as schizophrenia, attention deficit disorder, anxiety,
 CC depression, dementia and bipolar disorder, neurological disorders such as
 CC Huntington's disease, Parkinson's disease and Tourette's syndrome,
 CC metabolic disorders such as obesity, anorexia and type 2 diabetes,
 CC cardiovascular disorders such as thrombosis, myocardial infarction,
 CC cardiomyopathy and atherosclerosis, viral infections caused by HIV and
 CC cancers.
 XX CC
 XX SO Sequence 19 AA;
 Query Match 100.0%; Score 113; DB 22; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e-09; 0; Mismatches 0; Gaps 0;
 Matches 19; Conservative 0; Indels 0; Gaps 0;
 QY 1 DFDMLRCMLGRYRRCMOV 19
 DB 1 DFDMLRCMLGRYRRCMOV 19
 RESULT 6
 AAE07335 AAE07335 standard; peptide; 19 AA.
 XX AC AAE07335;
 XX DT 06-NOV-2001 (first entry)
 XX DE Mammalian melanin-concentrating hormone receptor.
 XX DE Melanin-concentrating hormone; MCH analogue; signal transduction;
 KW appetite; therapy; anorexia; acquired immune deficiency syndrome; AIDS;
 KW wasting; cachexia; frail elderly; weight maintenance; cancer; anorectic;
 KW pain reduction; stress reduction; sexual dysfunction; cyclic.
 XX OS Mammalia.
 XX FT Key Location/Qualifiers
 FT Disulfide-bond 7..16
 XX PN MO200157070-A1.
 XX PD 09-AUG-2001.
 XX PF 01-FEB-2001; 2001MO-US03293.
 XX PR 03-FEB-2000; 2000US-0179967.
 XX PA (MERI) MERCK & CO INC.
 XX PI Bednarek M;
 XX DR WPI; 2001-483416/52.
 XX PT Novel peptide encoding a melanin-concentrating hormone analog useful
 PT for increasing weight or appetite

XX PS Example 4; Fig 1; 66pp; English.
 XX CC The present invention relates to truncated melanin-concentrating hormone
 CC (MCH) analogues active at the MCH receptor. The truncated MCH analogues
 CC are optionally modified peptide derivatives of mammalian MCH. The MCH
 CC analogues can bind to the MCH receptor and bring about signal
 CC transduction. The MCH agonists can be used to facilitate a weight gain,
 CC maintenance of weight and/or an appetite increase. The MCH agonists can
 CC also be used to treat disorders such as anorexia, acquired immune
 CC deficiency syndrome (AIDS), wasting, cachexia and frail elderly. The MCH
 CC antagonists can be used to facilitate weight loss, appetite decrease,
 CC weight maintenance, cancer treatment, pain reduction, stress reduction
 CC and/or treatment of sexual dysfunction. The present sequence is a
 CC mammalian MCH receptor.
 XX CC
 XX SO Sequence 19 AA;
 Query Match 100.0%; Score 113; DB 22; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e-09; 0; Mismatches 0; Gaps 0;
 Matches 19; Conservative 0; Indels 0; Gaps 0;
 QY 1 DFDMLRCMLGRYRRCMOV 19
 DB 1 DFDMLRCMLGRYRRCMOV 19
 RESULT 7
 AAB68894 AAB68894 standard; Peptide; 19 AA.
 XX ID AAB68894;
 XX AC AAB68894;
 XX DT 24-APR-2001 (first entry)
 XX DE Human mMCH.
 XX DE Human: mMCH; mammalian melanin-concentrating hormone; AXOR21;
 KW G-protein coupled receptor; anorectic; antidiabetic; cyrostatic;
 KW antistimatic; antiparkinsonian; cardiac; hypertensive; osteopathic;
 KW antitanginal; cerebroprotective; antitumor; antiallergic; antinigraine;
 KW antiemetic; tranquilizer; antitonic; gene therapy; vaccine; cancer;
 KW neurological disorder.
 XX OS Homo sapiens.
 XX FT MO200107606-A1.
 XX PN MO200107606-A1.
 XX PD 01-FEB-2001.
 XX PF 27-JUL-2000; 2000MO-GB02899.
 XX PR 27-JUL-1999; 99GB-0017627.
 XX PR 24-AUG-1999; 99GB-0020046.
 XX PA (SMIR) SMITHKLINE BEECHAM PLC.
 XX PI Duckworth DM, Hill J, Mulr AI, Szekeres PG;
 XX DR WPI; 2001-182790/18.
 XX PT Novel G-protein coupled receptor polypeptide, AXOR21, useful for
 PT treating obesity, diabetes, eating disorders such as anorexia and
 PT bulimia, hypertension, osteoporosis, angina pectoris and myocardial
 PT infarction -
 XX PS Disclosure; Page 31; 42pp; English.
 XX CC The present sequence is mammalian melanin-concentrating hormone (mMCH).
 CC mMCH is a ligand for AXOR21, a G-protein coupled receptor.
 CC AXOR21 polynucleotides and polypeptides are useful for treating and
 CC diagnosing conditions such as pain, cancers, diabetes, obesity, anorexia,
 CC bulimia, asthma, Parkinson's disease, acute heart failure, hypotension,

hyperextension, urinary retention, osteoporosis, angina pectoris, myocardial infarction, stroke, ulcers, allergies, benign prostatic hyperplasia, migraines, vomiting, psychotic and neurological disorders including anxiety, schizophrenia, manic depression, depression, delirium, dementia and severe mental retardation, and dyskinesia such as Huntington's disease or Gilles de la Tourette's syndrome. AXOR21 polynucleotides and polypeptides are also useful for screening and structure based designing of antagonists, agonists and inhibitors of AXOR1. AXOR21 polynucleotides are useful for chromosome localization studies, as diagnostic reagents for detecting mutations in associated genes, and as valuable tools for tissue expression studies. AXOR21 polynucleotides and polypeptides are useful as vaccines.

Sequence 19 AA:

Query Match 100.0%; Score 113; DB 22; Length 19;
Best Local Similarity 100.0%; Pred. No. 1e-09;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 DFDMLRCHMGRYRRCMV 19
1 DFDMLRCHMGRYRRCMV 19

RESULT 8
AAB48153 standard; peptide: 19 AA.
AAB48153:
02-APR-2001 (first entry)
Rat/human melanin-concentrating hormone (MCH) receptor fragment.
MCH receptor; melanin-concentrating hormone; anorectic; antileptin; immunomodulator; antiparkinsonian; nootropic; anticonvulsant; human; neuroprotective; vasotropic; tranquilizer; antidepressant; neuroleptic; gynecological; contraceptive; osteopathic; GPR24; SLC-1; rat.
Homo sapiens.
Rattus norvegicus.
WO200075166-A1.
14-DEC-2000.
06-JUN-2000; 2000MO-US15503.
08-JUN-1999; 99US-0327807.
(REGC) UNITV CALIFORNIA.
Clivell O, Saito Y, Nohacker H;
WPI; 2001-050021/06.
Use of melanin concentrating hormone receptor for identifying MCH receptor agonist or antagonist, receptor ligand, and an individual susceptible to the receptor-associated conditions such as memory disorders.
Disclosure; Fig 4A; 61pp; English.
The invention relates to the use of MCH (melanin-concentrating hormone) receptor for identifying (1) agonist or antagonist of the receptor, (11) an MCH receptor ligand, (111) an individual having or susceptible to MCH receptor-associated conditions. Human and rat MCH receptor sequences are provided which can be used in the method of the invention for identifying disorders of body weight (such as disorders involving increased (obesity) or decreased body weight such as under weight or cachexia), mood (depression), anxiety disorders, psychotic disorders, schizophrenia), memory and learning (Alzheimer's disease, dementia, etc.), sleep (insomnia, bedwetting, sleepwalking, sleep apnea, etc.), dopaminergic

system function (such as Parkinson's disease, Huntington's disease), reproduction (as male or female contraceptives, or male or female sexual dysfunction, impotence, failure of lactation, infertility, etc.) or growth (dwarfism or acromegaly) and also disorders of behaviour such as autistic disorder, Asperger's disorder etc. The agonist or antagonist compounds can be used therapeutically to prevent or ameliorate these conditions. Identifying an individual having or susceptible to MCH receptor associated conditions allows optimal medical care for the individual, including appropriate genetic counseling and prophylactic and therapeutic intervention. The present sequence represents a fragment of the rat/human MCH receptor.

Sequence 19 AA:

Query Match 100.0%; Score 113; DB 22; Length 19;
Best Local Similarity 100.0%; Pred. No. 1e-09;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 DFDMLRCHMGRYRRCMV 19
1 DFDMLRCHMGRYRRCMV 19

RESULT 9
AAB37951 standard; peptide: 19 AA.
AAB37951:
08-MAR-2001 (first entry)
Melanin concentrating hormone (MCH) peptide sequence.
Somatostatin-like receptor; SLC-1; melanin concentrating hormone; MCH; obesity; eating disorder.
Unidentified.
WO200070347-A1.
23-NOV-2000.
19-MAY-2000; 2000MO-SE01010.
19-MAY-1999; 99US-0134844.
14-JUN-1999; 99US-0138675.
(ASTR) ASTRAZENCA AB.
Ahmad S, Cao J, Grazzini E, Lembo P, Walker P;
WPI; 2001-025045/03.
Assaying compounds that bind to somatostatin-like receptor (SLC-1), useful for treating obesity and eating disorders, comprises incubating cells expressing SLC-1 genes with melanin concentrating hormones and the test compound(s).
Disclosure; Page 3; 17pp; English.
This invention relates to assays which can be used to test compounds for their ability to bind to the somatostatin-like receptor (SLC-1 receptor). The assay comprises incubating a cell expressing SLC-1 receptor gene with melanin concentrating hormone (MCH) and the test compound, and determining the extent to which binding of the MCH is displaced by the test compound. The method is useful for determining whether a test compound can be used to modulate the binding of MCH to the SLC-1 receptor. Compounds identified as modulators may be used as therapeutic agents in treating obesity and eating disorders. This sequence represents the melanin concentrating hormone (MCH) amino acid sequence.

Query Match 100.0%; Score 113; DB 22; Length 19;
 Best Local Similarity 100.0%; Pred. No. 1e-09;
 Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DFDMLRCHLGRVYRRCMOV 19
 |||
 DB 1 DFDMLRCHLGRVYRRCMOV 19

RESULT 10

AA077533
 ID AA077533 standard; Protein; 19 AA.
 AC AA077533;

DT 05-JUN-2002 (first entry)

DE Melanin concentrating hormone (MCH).

XX G protein-coupled orphan; receptor; SLT; melanin-concentrating hormone;

KW MCH; appetite-stimulating agent; obesity; malignant mastocytosis;

KW exogenous obesity; hyperinsulinar obesity; sexual function disorder;

KW overpowering intermittent pain; still born; uterus rupture;

KW premature birth; Prader-Willi syndrome.

XX Homo sapiens.

XX Modified-site 1 Location/Qualifiers

FT /label- OTHER
 FT /note- "OTHER-3-[4-hydroxy-3-(125-1odo)-phenyl]
 FT propanoyl"

FT Disulfide-bond 7..16

XX - WO200203070-A1.

XX 10-JAN-2002.

XX 04-JUL-2001; 2001WO-JP05809.

XX 05-JUL-2000; 2000JP-0208254.

XX (TAKE) TAKEDA CHEM IND LTD.

XX Mori M, Shimomura Y, Harada M, Sugo T, Shintani Y;

XX WPI; 2002-164552/21.

XX Screening for compounds or salts which alter affinity of
 PT melanin-concentrating hormone with its receptor to provide agonists as
 PT appetite-stimulating agents and its antagonist for preventing or
 PT treating obesity, uses a protein or hormone -

XX Claim 8; Page 17; 112pp; Japanese.

XX The invention describes a method of screening for compounds or their
 CC salts that can change affinity of melanin-concentrating hormone (MCH)
 CC with its G protein-coupled orphan receptor protein, SLT. The screened
 CC MCH receptor agonists are useful as appetite-stimulating agents and its
 CC antagonist for preventing or treating obesity e.g. malignant

CC mastocytosis, exogenous obesity and hyperinsulinar obesity, and also

CC for treating sexual function disorders, overpowering intermittent pains,

CC still horns, uterus rupture, premature birth and Prader-Willi syndrome.

CC This sequence represents the melanin-concentrating hormone (MCH),
 CC described in the invention.

XX Sequence 19 AA;

XX Query Match 100.0%; Score 113; DB 23; Length 19;

XX Best Local Similarity 100.0%; Pred. No. 1e-09;

XX Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DFDMLRCHLGRVYRRCMOV 19

DB |||
 1 DFDMLRCHLGRVYRRCMOV 19

RESULT 11

AA07360
 ID AA07360 standard; Protein; 165 AA.

XX AA07360;

DT 29-JAN-1991 (first entry)

DE Rat melanin-concentrating precursor.

XX Melanin concentrating hormone; skin disorders; melanomas;

KW ACTH secretion.

XX Key Location/Qualifiers

FT Region 131..146
 FT /label-rat MCH peptide

XX NO9011295-A.

XX 04-OCT-1990.

XX 20-MAR-1990; 90WO-US01492.

XX 22-MAR-1989; 89US-0326984.

XX (SALK) SALK INST FOR BIOL STUD.

XX Vaughan J, Fischer WH, Rivier JE, Nahon JM, Presse FG, Vale WR;

XX WPI; 1990-320225/42.

XX N-PSDB; AA006245.

XX Cyclic mammalian hormone for concentrating mammalian melanin -

PT comprises peptide based on 19 amino acid residues with cysteine

PT linkages.

XX Disclosure; page 34; 47pp; English.

XX This is therat melanin-concentrating hormone (MCH) precursor.

XX See also AA006238-42, AA006244 and AA006246-48.

XX Sequence 165 AA;

Query Match 100.0%; Score 113; DB 11; Length 165;

Best Local Similarity 100.0%; Pred. No. 8.1e-09;

Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 DFDMLRCHLGRVYRRCMOV 19
 |||
 DB 147 DFDMLRCHLGRVYRRCMOV 165

RESULT 12

AA012780
 ID AA012780 standard; Peptide; 18 AA.

XX AA012780;

DT 22-NOV-2000 (first entry)

DE Rat MCH ligand peptide SEQ ID NO:19.

XX SLIC-1; MHC; melanin concentrating hormone; screening; eating;

KW appetite stimulator; appetite regulator; period pain; atonic bleeding;

KW caesarian section; milk congestion; antioleptic agent; drug;

KW foetal asphyxia; cervical rupture; premature birth; uterine rupture;

KW Prader-Willi syndrome; anorectic; gynaecological; abortifacient;

KW antoanemia; anabolic; orphan G protein-couple receptor protein.

XX

OS Rattus sp. Location/Qualifiers
 XX Key
 FT Disulfide-bond 6..15
 XX
 XX
 PN WO200040725-A1.
 XX
 XX
 PD 13-JUL-2000.
 XX
 XX 27-DEC-1999; 99WO-JP07336.
 XX
 XX 28-DEC-1998; 98JP-0374454.
 PR 28-APR-1999; 99JP-0122688.
 PR 02-SEP-1999; 99JP-0249300.
 XX
 XX (TAKE) TAKEDA CHEM IND LTD.
 XX
 XX Mori M, Shiomura Y, Takakawa S, Sugo T, Ishibashi Y, Kitada C,
 PI Suzuki N;
 XX
 DR WPI; 2000-475832/41.
 XX
 PT Screening methods for compounds as SLC-1 (anti)agonists useful in the
 PT treatment of eating disorders and as preventives and remedies for e.g.
 PT atonic bleeding and Prader-Willi syndrome
 XX
 XX Example 17; Page 117; 123pp; Japanese.
 XX
 XX The present invention describes a method for screening components (I) or
 CC their salts that can alter the binding properties of melanin-
 CC concentrating hormone (MCH) or its derivative or salt to SLC-1 or its
 CC salt. Compounds identified by (I) are useful as SLC-1 (anti)agonists in
 CC eating disorders and as preventives and remedies for e.g. period pains,
 CC uterine recovery failure, caesarean section, artificial interruption of
 CC pregnancy, galactostasis, tonic uterine contraction, foetal asphyxia,
 CC rupture of uterus, cervical rupture, premature birth and Prader-Willi
 CC syndrome. The present sequence represents a rat MHC ligand peptide
 CC which is used in the exemplification of the present invention.
 XX
 SO Sequence 18 AA:
 XX
 Query Match 94.7%; Score 107; DB 21; Length 18;
 Best Local Similarity 100.0%; Pred. No. 7.4e-09;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 2 FDMLRGMLGRVYRPMQV 19
 DB 1 FDMLRGMLGRVYRPMQV 18
 XX
 RESULT 13
 ID AAU77534 standard; Protein; 18 AA.
 XX
 AC AAU77534;
 XX
 DE 05-JUN-2002 (first entry)
 XX
 DE Melanin concentrating hormone (MCH) residues 2-19.
 XX
 KM G protein-coupled orphan; receptor; SLT; melanin-concentrating hormone;
 KM MCH; appetite-stimulating agent; obesity; malignant mastocytosis;
 KM exogenous obesity; hyperinsulinar obesity; sexual function disorder;
 KM overpowering intermittent pain; still born; uterus rupture;
 KM premature birth; Prader-Willi syndrome.
 XX
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FT Modified-site 1
 FT /label= OTHER
 FT /note= "OTHER- 3-[4-hydroxy-3-(125-Iodo)-phenyl]
 FT propanoyl"]
 FT

FT Disulfide-bond 6..15
 XX
 XX
 PN WO200203070-A1.
 XX
 XX 10-JAN-2002.
 XX
 XX 04-JUL-2001; 2001MO-JP05809.
 XX
 XX 05-JUL-2000; 2000JP-0208254.
 XX
 XX (TAKE) TAKEDA CHEM IND LTD.
 XX
 XX Mori M, Shiomura Y, Harada M, Sugo T, Shintani Y;
 PI WPI; 2002-164552/21.
 XX
 DR
 XX
 PT Screening for compounds or salts which alter affinity of
 PT melanin-concentrating hormone with its receptor to provide agonists as
 PT appetite-stimulating agents and its antagonist for preventing or
 PT treating obesity, uses a protein or hormone
 XX
 XX Disclosure; Page 17; 112pp; Japanese.
 XX
 XX The invention describes a method of screening for compounds or their
 CC salts that can change affinity of melanin-concentrating hormone (MCH)
 CC with its G protein-coupled orphan receptor protein, SLT. The screened
 CC MCH receptor agonists are useful as appetite-stimulating agents and its
 CC antagonist for preventing or treating obesity e.g. malignant
 CC mastocytosis, exogenous obesity and hyperinsulinar obesity, and also
 CC for treating sexual function disorders, overpowering intermittent pains,
 CC still borns, uterus rupture, premature birth and Prader-Willi syndrome.
 CC This sequence represents a segment of the melanin-concentrating hormone
 CC (MCH), described in the invention.
 XX
 SO Sequence 18 AA:
 XX
 Query Match 94.7%; Score 107; DB 23; Length 18;
 Best Local Similarity 100.0%; Pred. No. 7.4e-09;
 Matches 18; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 2 FDMLRGMLGRVYRPMQV 19
 DB 1 FDMLRGMLGRVYRPMQV 18
 XX
 RESULT 14
 ID AAU77535 standard; Protein; 17 AA.
 XX
 AC AAU77535;
 XX
 DE 05-JUN-2002 (first entry)
 XX
 DE Melanin concentrating hormone (MCH) residues 3-19.
 XX
 KM G protein-coupled orphan; receptor; SLT; melanin-concentrating hormone;
 KM MCH; appetite-stimulating agent; obesity; malignant mastocytosis;
 KM exogenous obesity; hyperinsulinar obesity; sexual function disorder;
 KM overpowering intermittent pain; still born; uterus rupture;
 KM premature birth; Prader-Willi syndrome.
 XX
 OS Homo sapiens.
 XX
 XX Key Location/Qualifiers
 FT Modified-site 1
 FT /label= OTHER
 FT /note= "OTHER- 3-[4-hydroxy-3-(125-Iodo)-phenyl]
 FT propanoyl"]
 XX
 XX Disulfide-bond 5..14
 XX WO200203070-A1.
 XX 10-JAN-2002.
 PD

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XX 04-JUL-2001; 2001WO-JP05809.
XX
XX 05-JUL-2000; 2000JP-0208254.
XX
XX (TAKE ) TAKEDA CHEM IND LTD.
XX
XX Mori M, Shimomura Y, Harada M, Sugo T, Shintani Y;
XX WPI; 2002-164552/21.
XX
XX Screening for compounds or salts which alter affinity of
XX melanin-concentrating hormone with its receptor to provide agonists as
XX appetite-stimulating agents and its antagonist for preventing or
XX treating obesity, uses a protein or hormone .
XX
XX Disclosure; Page 17; 112pp; Japanese.
XX
XX The invention describes a method of screening for compounds or their
XX salts that can change affinity of melanin-concentrating hormone (MCH)
XX with its G protein-coupled orphan receptor protein, S1T. The screened
XX MCH receptor agonists are useful as appetite-stimulating agents and its
XX antagonist for preventing or treating obesity e.g. malignant
XX mastocytosis, exogenous obesity and hyperinsular obesity, and also
XX for treating sexual function disorders, overpowering intermittent pains,
XX still borns, uterus rupture, premature birth and Prader-Willi syndrome.
XX This sequence represents a segment of the melanin-concentrating hormone
XX (MCH), described in the invention.
XX
SQ - Sequence 17 AA;

Query Match 89.4%; Score 101; DB 23; Length 17;
Best Local Similarity 100.0%; Pred. No. 5.2e-08;
Matches 17; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 3 DMLRCMIGRYRRCMOV 19
DB 1 DMLRCMIGRYRRCMOV 17

RESULT 15
AAE07337
ID AAE07337 standard; peptide; 19 AA.
XX
XX AAE07337;
XX
XX 06-NOV-2001 (first entry)
XX
XX Human truncated melanin-concentrating hormone receptor analogue #6.
XX
XX Human; melanin-concentrating hormone; MCH analogue; signal transduction;
XX appetite; anorexia; acquired immune deficiency syndrome; AIDS;
XX wasting; cachexia; frail elderly; weight maintenance; cancer; anorectic;
XX pain reduction; stress reduction; sexual dysfunction; cyclic.
XX
XX Homo sapiens.
XX OS
XX Synthetic.
XX
XX Key Location/Qualifiers
XX Modified-site 4 /label- N1e
XX Disulfide-bond 7..16
XX Modified-site 8 /label- N1e
XX
XX MO300157070-A1.
XX
XX 09-AUG-2001.
XX
XX 01-FEB-2001; 2001WO-US03293.
XX
XX 03-FEB-2000; 2000US-0179967.
XX

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PA (MERT ) MERCK & CO INC.
XX
XX Bednarek M;
XX
XX WPI; 2001-483416/52.
XX
XX Novel peptide encoding a melanin-concentrating hormone analog useful
XX for increasing weight or appetite .
XX
XX Example 4; Page 12; 66pp; English.
XX
XX The present invention relates to truncated melanin-concentrating hormone
XX (MCH) analogues active at the MCH receptor. The truncated MCH analogues
XX are optionally modified peptide derivatives of mammalian MCH. The MCH
XX analogues can bind to the MCH receptor and bring about signal
XX transduction. The MCH agonists can be used to facilitate a weight gain,
XX maintenance of weight and/or an appetite increase. The MCH agonists can
XX also be used to treat disorders such as anorexia, acquired immune
XX deficiency syndrome (AIDS), wasting, cachexia and frail elderly. The MCH
XX antagonists can be used to facilitate weight loss, appetite decrease,
XX weight maintenance, cancer treatment, pain reduction, stress reduction
XX and/or treatment of sexual dysfunction. The present sequence is a human
XX truncated MCH receptor analogue.
XX
SQ - Sequence 19 AA;

Query Match 89.4%; Score 101; DB 22; Length 19;
Best Local Similarity 89.5%; Pred. No. 5.8e-08;
Matches 17; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 DFDLRCMIGRYRRCMOV 19
DB 1 DFDLRCMIGRYRRCMOV 19

Search completed: June 12, 2003, 15:27:59
Job time : 36 secs

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